

# °LAUDA



## SHAKERS

Powerful, resilient, durable. GFL Technology.

°FAHRENHEIT. °CELSIUS. °LAUDA.

# LAUDA Shakers



## Wide range of applications

Whether orbital shakers, back and forth or overhead shakers, from 15 ml and 50 ml test tubes to Erlenmeyer flasks and canisters: LAUDA shakers are available in many variants for every application, and shake every sample reliably and evenly.



## Extensive accessories

LAUDA shakers can be used for a large number of applications, thanks to an extensive range of accessories. From adhesive mats to universal mounts, the devices can be optimally equipped for any requirements.



## Reliable and durable

Shakers are the trusty ›workhorse‹ of the laboratory and are used by many workers on a daily basis. LAUDA shakers are manufactured with ›GFL Technology‹ and are a byword for top quality, reliability and durability.



### GFL Technology – Premium quality in a first-class design

With the new Varioshake shakers, LAUDA is expanding its product range of reliable laboratory devices for a comprehensive range of application. The LAUDA Varioshake product line comprises six shakers in three sizes with three different shaking motions, as well as three shaking incubators in three sizes with one shaking motion. Like the new LAUDA Hydro water baths, the Varioshake shakers feature ›GFL Technology‹ and represent the many years of experience and outstanding quality of premium manufacturer LAUDA-GFL Gesellschaft für Labortechnik, which became part of the LAUDA Group on December 31, 2018. With modern LAUDA design and excellent performance data, the new GFL Technology laboratory devices stand for premium quality and precision. A comprehensive range of accessories ensures high flexibility and provides solutions for large number of laboratory applications.



#### Attractively priced and versatile

Whether they are used for standard tasks with low demands or as a special solution for individual applications, LAUDA shakers and shaker incubators are versatile and attractively priced.



#### Compact design

LAUDA shakers fit into any laboratory environment, thanks to their minimal space requirements. The compact design provides a small footprint on the work surface and guarantees integration in standard incubators.



#### Perfect temperature control

LAUDA shaking incubators also permit extremely demanding applications with active temperature control and high temperature stability.





# LAUDA Varioshake shakers

## Applications and product features

### Resilient, powerful, durable

LAUDA Varioshake shakers score with superior quality, durability and absolute reliability. Their sturdy, low-wear mechanical system ensures extremely smooth operation and reliable continuous duty. Varioshake shakers and tailored accessories are the ideal solution whenever careful mixing or vigorous shaking are required.



The robust entry-level shakers with digital controls – Varioshake VS 8 O and VS 8 B

### Typical areas of application

Orbital, linear and overhead shaking in:

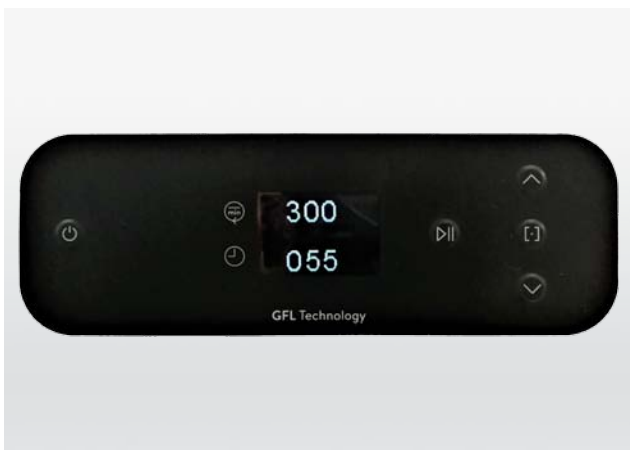
- Biology and microbiology
- Medical diagnostics
- Analytical laboratories
- Testing institutes, universities and research facilities
- Quality assurance laboratories



Modern digital controls and extended range of functions – Varioshake VS 15 O and VS 15 B

### Infinitely variable, soft start-up

The digitally controlled shakers provide an extended timer range, start/stop function and high reproducibility by saving the most recent operating parameters.



With digital controls – intuitive and easy to operate

### Shaking incubators

Simple and compact or robust with several shaking levels: LAUDA Varioshake shaking incubators are specialists in mixing and shaking with exactly reproducible circular movements and temperatures up to 70 °C. They offer comprehensive functionality and optimum temperature distribution throughout the chamber.



Varioshake VS 60 OI – compact, economic, powerful

# Technical data

Device type	Ambient temperature °C	Size of moving table mm	Max. load bearing capacity kg	Shaking amplitude mm	Shaking frequency rpm	Movement type**	Dimensions (W x D x H) mm	Weight kg	Mains voltage	Max. power consumption kW	Part Number
<b>Shakers</b>											
VS 8 O	10 ... 50	330 x 330	8	10	20 ... 500	O	350 x 355 x 160	11.0	230 V; 50 Hz	0.07	L003057
VS 8 B	10 ... 50	330 x 330	8	20	20 ... 300	B	350 x 355 x 160	11.0	230 V; 50 Hz	0.07	L003058
VS 15 O	10 ... 50	450 x 450	15	30	20 ... 300	O	480 x 487 x 160	19.5	230 V; 50 Hz	0.07	L003061
VS 15 B	10 ... 50	450 x 450	15	30	20 ... 300	B	480 x 487 x 160	19.5	230 V; 50 Hz	0.07	L003062
VS 30 O	10 ... 50	676 x 540	30	32	20 ... 250	O	705 x 607 x 160	34.0	230 V; 50 Hz	0.09	L003063
VS 20 OH	10 ... 40	-	20	-	1 ... 20	OH	770 x 700 x 715	62.0	230 V; 50/60 Hz	0.10	L003064

Device type	Ambient temperature °C	Working temperature range °C	Working temperature range with water cooling °C	Temperature stability ±K	Max. heating output kW	Chamber dimensions mm	Chamber volume L	Max. load bearing capacity kg	Shaking amplitude mm	Shaking frequency rpm	Movement type**	Dimensions (W x D x H) mm	Weight kg	Mains voltage	Max. power consumption kW	Part Number
<b>Shaking incubators</b>																
VS 60 OI <sup>1</sup>	10 ... 30	28 ... 70	20 ... 70	0.20	0.5	450 x 450 x 338	68	12	30	20 ... 250	O	559 x 687 x 628	41.5	230 V; 50/60 Hz	0.80	L003052
VS 45 OI <sup>2</sup>	10 ... 30	28 ... 70	20 ... 70	0.20	0.5	420 x 270 x 320	45	12	25	20 ... 250	O	710 x 650 x 710	70.0	230 V; 50/60 Hz	0.80	L003053
VS 150 OI <sup>3</sup>	10 ... 30	28 ... 70	20 ... 70	0.20	0.5	674 x 540 x 430	150	20	25	20 ... 250	O	930 x 890 x 820	135.0	230 V; 50/60 Hz	0.80	L003054

<sup>1</sup> with acrylic cover

<sup>2</sup> with one front door

<sup>3</sup> with two front doors

\*\* Movement pattern: O = orbital

B = bi-directional / Linear

OH = overhead



# LAUDA Varioshake accessories

For every purpose

	Designation	VS 8 O / B
<b>Shaking trays, supports, rack attachments (suitable for/max. number)</b>		
	Adhesive mats, black, 200 x 200 mm, can be cut to size	2
	Non-slip support	1
	Non-slip support	-
	Shaking tray	1
	Shaking tray	-
	Shaking tray	-
	Shaking tray	-
	Universal attachment	1
	Universal attachment	-
	Universal attachment	-
<b>Clamp for screwing onto trays (suitable for/max. number)</b>		<b>A000044</b>
	Clamp for Erlenmeyer flask 25 ml	45
	Clamp for Erlenmeyer flask 50 ml	25
	Clamp for Erlenmeyer flask 100 ml	16
	Clamp for Erlenmeyer flask 200 ml	12
	Clamp for Erlenmeyer flask 250 - 300 ml	9
	Clamp for Erlenmeyer flask 500 ml	9
	Clamp for Erlenmeyer flask 1000 ml	4
	Clamp for Erlenmeyer flask 2000 ml	2
	Clamp for 50 ml separating funnel (Squibb)	6
	Clamp for 100 ml separating funnel (Squibb)	6
	Clamp for 250 ml separating funnel (Squibb)	4
	Clamp for 250 ml separating funnel (conical)	4
	Clamp for 500 ml separating funnel (Squibb)	3
<b>Clamp / mount for screwing onto trays (suitable for/max. number)</b>		<b>A000044</b>
	Test tube rack for max. 24 tubes of 12 - 17 mm Ø, length 75 - 160 mm	3
	Test tube rack for max. 16 tubes of 25 - 29 mm Ø, length 75 - 160 mm	2
	Mount for test plates	4

VS 15 O / B	VS 30 O	VS 20 OH	VS 60 OI	VS 45 OI	VS 150 OI	Part Number
4	8	-	4	6	8*	A000041
-	-	-	-	-	-	A000042
1	-	-	1	-	-	A000043
-	-	-	-	-	-	A000044
1	-	-	1	-	-	A000045
-	-	-	-	2	-	A000046
-	1	-	-	-	2	A000047
-	-	-	-	-	-	A000048
1	-	-	1	-	-	A000049
-	1	-	-	-	-	A000050
<b>A000045</b>	<b>A000047</b>	-	<b>A000045</b>	<b>A000046*</b>	<b>A000047*</b>	
79	99	-	79	52	99	A000025
49	99	-	49	33	99	A000026
36	50	-	36	22	50	A000027
22	26	-	22	15	26	A000028
16	26	-	16	13	26	A000029
12	26	-	12	10	26	A000030
9	12	-	9	6	12	A000031
4	9	-	4	3	9	A000053
11	-	-	-	-	-	A000054
11	-	-	-	-	-	A000055
8	-	-	-	-	-	A000056
8	-	-	-	-	-	A000057
6	-	-	-	-	-	A000058
<b>A000045</b>	<b>A000047</b>	-	<b>A000045</b>	<b>A000046*</b>	<b>A000047*</b>	
6	9	-	6	3	9	A000059
4	8	-	4	3	8	A000060
6	-	-	6	6	15	A001743

\* Specified maximum quantity per tray

VS 45 OI (tray A000046): Only 1 tray can be used from a flask size of 300 ml

VS 150 OI (tray A000047): Only 1 tray can be used from a flask size of 1000 ml

